

REMARKS

Claims 1 through 4, 6 through 16, 18 through 20 and 22 through 26 are pending in the application.

Claim 1 has been amended to emphasize advantageous inventive embodiments in which the coating does not include plasticizer. Support for this amendment can be found in the Application-as-filed, for example on Page 8, lines 1 through 3, noting the optional use of plasticizer.

Claims 2 and 12 have been amended to emphasize advantageous embodiments in which the inventive transferable coatings consist of a mixture of at least one edible binder; aroma substances, dyes and/or flavorings; and optional crosslinker, citrate or smoke treatment. Support for this amendment can be found in the Application-as-filed, for example on Page 3, lines 32 through 35 and Page 4, line 36 through Page 5, line 3.

Claim 13 has been amended to conform to Claim 12 as-amended.

Claim 23 has been amended to reflect advantageous embodiments in which a layer consisting of an essentially water-soluble material is arranged between the textile support layer and the transferable edible coating so that the transferable coating loses its anchoring under the action of moisture. Support for this amendment can be found in the Application-as-filed, for example on Page 5, lines 17 through 31.

Applicants respectfully submit that this response does not raise new issues, but merely places the above-referenced application either in condition for allowance, or alternatively, in better form for appeal. Reexamination and reconsideration of this application, withdrawal of all rejections, and formal notification of the allowability of the pending claims are earnestly solicited in light of the remarks which follow.

Section 112 Rejection

Claim 25 stands rejected over the recited coating weight range. Applicants respectfully submit that the Application-as-filed on Page 8, lines 5 through 7 indicates that the inventive coatings may be applied via doctor blade application, which is well known in the art to apply coatings having the recited weight range. The Application-as-filed further provides support for the recited end points on Page 8, lines 25 through 30 (Example 1) and Page 9, line 29 through 35 (Example 3), as kindly noted by the Examiner.

Applicants additionally respectfully submit that there is no requirement under United States practice of “in *ipsis verbis*,” and the written description requirement does not require the applicant to “describe exactly the subject matter claimed.” *In re Gostelli*, 872 F.2d 1008, 1012 (Fed Cir. 1989). Thus it is “unnecessary to spell out every detail of the invention in the specification.” *LizardTech, Inc. v. Earth Resource Mapping*, 424 F.3d 1336, 1345 (Fed. Cir. 2005). Hence the Application-as-filed provides adequate support for the recited weight range. Applicants further respectfully submit that the Application-as-filed sufficiently indicates to one of ordinary skill in the art that Applicants had possession of the claimed recitation (and invention). Accordingly, Applicants respectfully request withdrawal of the foregoing rejection.

The Claimed Invention is Patentable
in Light of the Art of Record

Claims 1 through 4, 6 through 16, 18 through 20 and 22 through 26 stand rejected over published European Patent Application EP 408164 (EP 164) to Ito et al in light of United States Patent Application Publication No. 2001/0008658 (US 658) to Barmore.

It may be helpful to briefly consider the invention before addressing the merits of the rejection.

There remains in the art a long felt need for food casings which can transfer an ingredient, such as a dye, aroma substance, or flavoring, to a foodstuff situated therein. Transferable ingredients are challenging, because the coating and its transferable ingredient must be robust enough and adhere to the casing adequately to survive the stuffing process, yet the ingredient must have sufficient freedom to subsequently transfer to the foodstuff.

The type of casing upon which the transferable coating is applied greatly affects the coating adhesion, further exacerbating the challenges. Casings providing interstices, such as casings incorporating fabrics, would be expected to initially provide improved coating adhesion; however, such fabric casings would be expected to suffer from poor release properties. In addition, components such as crosslinkers may be incorporated into coatings to improve toughness; however, crosslinkers can be highly detrimental to casing flexibility, as alluded to by the Examiner. Poor coating flexibility is especially detrimental as coating thickness and/or ingredient particle size increases.

Altogether unexpectedly, Applicants have found that food casings incorporating a textile support layer and a transfer coating formed from edible binder that is not water-soluble or is only slightly water-soluble, but that does not include a plasticizer, can be transferred onto a foodstuff located in the casing, along with aromas, dyes and/or flavorings, as reflected in Claim 1 as-amended.

Applicants have more particularly found that highly advantageous casing coatings consisting of (i) at least one edible binder that is not water-soluble or is only slightly water-soluble; (ii) solid aromas, liquid aromas, dyes and/or flavorings and (iii) optional crosslinker, citrate or smoke treatment, in which the edible binder adheres to the textile support material less strongly than to a proteinaceous foodstuff provides a heretofore unknown balance of coating transfer and casing stuffability, as reflected in Claim 2 as-amended.

In especially advantageous embodiments, the edible binder is gelatin or collagen and the transfer coating further comprises a crosslinker, citrate, smoke treatment or has been heated to impart water insolubility, as recited in Claim 22.

In highly expedient aspects, the inventive food casings further include a layer consisting of an essentially water-soluble material arranged between the textile support layer and the transferable edible coating so that the transferable coating loses its anchoring under the action of moisture, as recited in Claim 23 as-amended.

In beneficial embodiments, the inventive coatings have a coating weight ranging from 33 g/m² to 59 g/m² and the aroma substance, dyes and/or flavorings are in coarse-grained or piece-form, as recited in Claim 25.

In particularly advantageous aspects, the inventive food casings include a layer made of an essentially water-soluble material, arranged between the textile support layer and the transferable edible coating, and the transferable edible coating is crosslinked to impart a smooth coating surface, thereby producing a uniform coating without gaps on the foodstuff, as recited in Claim 26.

Applicants respectfully reiterate that the cited references do not teach or suggest the claimed invention.

EP 164 is directed to food transfer sheets that include a web, a "size" layer, and a separate food material layer. (Figure 1 and Page 2, lines 27 – 29). The size layer is expressly noted as water soluble, with the transfer of the food material taking place under wet or moist conditions. (Page 3, lines 22 -23 and Page 4, line 7) The size layer releases the food material layer upon moistening to "neatly" transfer the food onto the surface of the substrate. (Page 3, lines 20 – 30 and Page 4, lines 5 - 9). Applicants respectfully reiterate that the at-least-partially dissolved size layer of EP 164 does not transfer together with the food layer, as echoed by the Examiner in the outstanding Office Action on Page 4, Ref. No. 9.

EP 164 particularly teaches a matrix layer (1), a size layer (2) and a superimposed food layer (3). (Figure 1 and Page 2, lines 29 – 31). EP 164 indicates that the food layer is deposited onto the surface of the size layer and subsequently “fixed” thereon; however, the food material remains as a discrete layer. (Page 3, lines 33 – 36 and Fig. 1). EP 164 more specifically notes that the size layer is “interposed between” the matrix layer and the food layer. (Page 2, lines 27 – 29; Page 3, lines 8 – 9 and Abstract). As previously noted by the Examiner, the food layer is applied onto the surface of the size layer by dusting or the like. (Page 3, lines 31 – 42). Working Example 1 applies a combined weight of 190 g/m². (Page 4, lines 19 – 30). Working Example 2 applies a combined weight of 100 g/m². (Page 4, 34 – 39). Working Example 3 applies a combined weight of 325 g/m². (Page 4, 45 – 51).

Applicants respectfully reiterate that EP 164 does not teach or suggest the claimed invention.

Applicants further respectfully reiterate that US 658 does not render the claimed invention obvious in combination with EP 164.

In contrast to the claimed textile support, US 658 is directed to films having a transferable coating. [0008 and 0047]. As correctly noted by the Examiner in the outstanding Office Action at Page 5, Ref. No. 10, US 658 includes a plasticizer to render its crosslinked composition more flexible. [0196]. The coatings of US 658 may be applied by gravure coating, printing or lithographic coating. [0009]. US 658 indicates that the films may be “printed” with coating on a portion of the product. [0009]. The working examples of US 658 apply liquid smoke or caramel via a gravure roll. [0166]. US 658 provides an extensive list of suitable binders that fails to include gelatin and collagen. [0014]. US 658 notes that an intermediate layer may be present between the film and transferable coating that can serve as a primer for the application of the transferable coating. [0023] “Additionally or alternatively,” this intermediate layer may contain either a “release agent” and/or a “crosslinking agent.” [0023]

Applicants respectfully reiterate that US 658 does not teach or suggest the claimed invention.

Applicants further respectfully reiterate that there would have been no motivation to have combined EP 164 and US 658. Applicants more particularly respectfully submit that textile reinforced food casings and food casings formed from polymeric films exhibit altogether different physical properties and are intended for different end uses. Reinforced food casings and polymeric film casings would be expected to exhibit differing adhesion to coatings, for example, due in part to the vastly different surface terrain provided by films versus fabric. Consequently, concepts may not be imputed from polymeric films to textile reinforced coatings.

However, even if EP 164 and US 658 were combined (which Applicants did not do), the claimed invention would not result.

The combination particularly does not teach or suggest the inventive food casings including a textile support layer and a single-layered transfer coating, in which the coating is not water-soluble or is only slightly water-soluble, does not include plasticizer, and transfers completely onto a foodstuff located in the casing, as recited in Claim 1 as-amended.

Applicants respectfully reiterate that EP 164 expressly teaches a water soluble resin onto which a separate layer has been disposed. US 658 is solely directed to films having a plasticized layer printed on its surface. As correctly indicated by the Examiner within the outstanding Office Action on Page 6, Ref. No. 13, the combination of EP 164 and US 658 would thus have instead have clearly required the incorporation of a plasticizer to impart flexibility. Applicants further respectfully submit that it was altogether unexpected to those skilled in the art that the inventive food casings incorporating a coating that is not water-soluble or is only slightly water-soluble and further contains flavorings or the like could be formed in the absence of a plasticizer.

The combination thus can not teach or suggest inventive embodiments in which the not water-soluble or is only slightly water-soluble coating consists of (i) at least one edible binder; (ii) solid aroma substances and/or liquid aroma substances, dyes and/or flavorings and (iii)

optional crosslinker, citrate or smoke treatment, much less such embodiments in which the edible binder adheres to the textile support material less strongly than to a proteinaceous foodstuff. As noted above, EP 164 requires a water soluble size layer and separate food layer. US 658 clearly requires the incorporation of a plasticizer to impart sufficient flexibility.

Nor does the combination teach or suggest advantageous inventive food casings in which the edible binder is gelatin or collagen and the transfer coating further comprises a crosslinker, citrate, smoke treatment or has been heated to impart water insolubility but does not include a plasticizer, as recited in Claim 22 as-amended. EP 164 requires a water soluble size layer. US 658, directed to transferable coatings, does not teach or suggest gelatin or collagen. Applicants further respectfully submit that they have determined that the recited gelatin or collagen adhere less strongly to the textile support within the inventive casing than to a proteinaceous foodstuff, thereby promoting complete coating transfer without damage.

And the combination most certainly does not teach or suggest such inventive food casings in which a layer made of an essentially water-soluble material is arranged between the textile support layer and the transferable coating so that the transferable coating loses its anchoring under the action of moisture, as recited in Claims 23 and 24 as-amended. EP 164 does not teach or suggest the incorporation of two binder layers. US 658 merely teaches an intermediate primer layer that may contain a further, separate release agent. Consequently, the combination of EP 164 and US 658 would have at best merely suggested the incorporation of a primer layer containing a release agent; e.g. a wax or silicon compound.

The combination similarly fails to teach or suggest the inventive food casings in which the casing has a moderate coating weight ranging from 33 g/m² to 59 g/m² and the aroma substance, dyes and/or flavorings are in coarse-grained or piece-form, as recited in Claim 25. EP 164 expressly teaches far heavier total coating weights, which EP 164 goes on to indicate as altogether suitable. Hence there would have been no motivation to have decreased the coating weights of EP 164. Applicants further respectfully submit that the printing methods of US 658 would not be expected to apply the recited moderate coating weights or coarse-grained or piece-

form materials. Applicants particularly respectfully submit that the gravure coating methods of US 658 are well known in the art for applying extremely low coating weights from laser engraved cells that are not suitable for application of the recited coarse-grained or piece-form particulates. Hence the recited coating weights are not the result of “optimization,” as urged within the outstanding Office Action on Page 8, Ref. No. 18.

Applicants respectfully submit that the combination further fails to teach or suggest inventive food casings in which a layer made of an essentially water-soluble material is arranged between the textile support layer and the transferable edible coating, and the transferable edible coating is crosslinked to impart a smooth coating surface to the coarse-grained or piece-forms, thereby producing a uniform coating without gaps on the foodstuff, as recited in Claim 26. As noted above, EP 164 simply does not teach or suggest the incorporation of two binder layers. US 658 merely teaches an intermediate primer layer that may contain a further, separate release agent. Consequently, the combination of EP 164 and US 658 would have at best merely suggested the incorporation of a primer layer containing a release agent.

Accordingly, Applicants respectfully reiterate that EP 164 and US 658 do not teach or suggest the claimed invention, considered either alone or in combination.

CONCLUSION

It is respectfully submitted that Applicants have made a significant and important contribution to the art, which is neither disclosed nor suggested in the art. It is believed that all of pending Claims 1 through 4, 6 through 16, 18 through 20 and 22 through 26 are in condition for allowance. It is requested that the Examiner telephone the undersigned if any questions remain to expedite examination of this application.

It is not believed that extensions of time or fees are required, beyond those which may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time and/or fees are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required is hereby authorized to be charged to Deposit Account No. 50-2193.

Respectfully submitted,

Cathy Moore

Cathy R. Moore

Reg. No. 45,764

ProPat, L.L.C.

425-C South Sharon Amity Road

Charlotte, North Carolina 28211-2841

Telephone: (704) 365-4881

Fax: (704) 365-4851

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Claire Wygand

Ms. Claire Wygand